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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/434,314	11/04/1999	PETER J. BLACK	PA000045	3810

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
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EXAMINER

LEE, JOHN J

ART UNIT

PAPER NUMBER

2682

DATE MAILED: 01/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/434,314

Applicant(s)

BLACK, PETER J.

Examiner

JOHN J LEE

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,19-22,24,25,27-31 and 37-39 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1,3-7,19-22,24,25,27-31 and 37-39 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's arguments with respect to claims 1, 3-7, 19-22, 24, 25, 27-31, 33, and 34 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 3-7, 19-22, 24, 25, 27-31, 33, 34, and 37-39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamabe et al. (US Patent number 6,351,651) in view of Hong et al. (US Patent number 6,337,984).

Regarding **claim 1**, Hamabe discloses that in a wireless communication system, a method for performing handoff comprising:

receiving, by the subscriber station (61A, 62A in Fig. 1), reverse link power control commands (Fig. 1, 7, column 20, lines 63 – column 22, lines 10, and column 26, lines 20 – 54); and

selectively performing said handoff in accordance with said reverse link power control commands (Fig. 1, 7, column 20, lines 63 – column 22, lines 10, column 30, lines 8 – 67, and column 26, lines 20 – 54).

Hamabe does not specifically disclose the limitation “determining, by a subscriber station, when a handoff is necessary”. However, Hong discloses the limitation “determining, by a subscriber station, when a handoff is necessary” (Fig. 3, 6 and column 5, lines 54 – column 6, lines 23). It would have been obvious to one having ordinary skill in the art, at the time the invention was made to modify Hamabe system as taught by Hong. Doing so would enhance controlling a handoff for quality communication in wireless communication system.

Regarding **claim 3**, Hamabe and Hong disclose all the limitation, as discussed in claim 1. Furthermore, Hamabe further discloses that selecting, by subscriber station, a base station to transmit to said subscriber station” (column 11, lines 27 – column 13, lines 37 and column 20, lines 63 – column 22, lines 10);

determining, by the subscriber station, in accordance with said reverse link power control commands whether signals transmitted by said subscriber station are being received by said selected base station with sufficient energy (Fig. 1, 7, column 20, lines 63 – column 22, lines 10, column 30, lines 8 – 67, and column 26, lines 20 – 54); and

performing said handoff to said selected base station when signals transmitted by said subscriber station are being received by said selected base station with sufficient energy (Fig. 1, 7, column 20, lines 63 – column 22, lines 10, column 30, lines 8 – 67, and column 26, lines 20 – 54).

Regarding **claim 4**, Hamabe discloses that performing said handoff comprises transmitting, by the subscriber, a message indicating the identity of sad selected base station (column 11, lines 27 – column 13, lines 36 and Fig. 1, 2).

Regarding **claim 5**, Hamabe discloses that the message further indicates a requested rate of transmission by said selected base station (abstract and column 7, lines 7 – column 8, lines 65).

Regarding **claim 6**, Hamabe discloses that the step of transmitting said message comprises spreading a message indicative of a requested rate by a signal indicative of said selected base station (column 1, lines 15 – column 2, lines 51).

Regarding **claim 7**, Hamabe and Hong disclose all the limitation as discussed in claims 1 and 3. Furthermore, Hamabe further discloses that determining that a base station used communicate with said subscriber station continues to have the strongest signal received by said subscriber station (column 21, lines 7 – column 22, lines 58 and Fig. 8, 9);

performing said handoff to an alternative base station when signals transmitted by said subscriber station are not being received by said determined base station with sufficient energy (column 27, lines 37 – column 28, lines 67 and Fig. 7).

Regarding **claim 19**, Hamabe and Hong disclose all the limitation as discussed in claims 1 and 3. Furthermore, Hamabe further discloses that a memory configured to store reverse link power control commands provided by one or more base stations (column 19, lines 3 – 60, column 21, lines 61 – column 22, lines 58, and column 13, lines 40 – column 14, lines 41); and

a processor coupled with the memory configured to permit a handoff to a selected base station of the one or more base stations according to the reverse link power control

commands (Fig. 8, column 19, lines 3 – 60, and column 21, lines 61 – column 22, lines 58).

Regarding **claim 20**, Hamabe and Hong disclose all the limitation as discussed in claims 1 and 19. Furthermore, Hamabe further discloses that an energy calculator configured to calculate the energy of a pilot signal from each of the one or more base stations (column 11, lines 42 – column 12, lines 19 and column 13, lines 63 – column 14, lines 17).

Regarding **claim 21**, Hamabe discloses that the processor is configured to select a rate of transmission for the selected base station according to the calculated energy of the pilot signals (column 18, lines 22 – column 19, lines 35 and Fig. 7, 9).

Regarding **claim 22**, Hamabe and Hong disclose all the limitation as discussed in claims 5 and 19.

Regarding **claim 24**, Hamabe discloses that the reverse link power control commands requesting the subscriber station to decrease its transmission energy are indicative that the reverse link signal is being received (column 7, lines 17 – column 9, lines 36 and abstract).

Regarding **claim 25**, Hamabe discloses that the reverse link power control commands requesting the subscriber station to increase its transmission energy are indicative that the reverse link signal is not being received (column 7, lines 17 – column 9, lines 36 and abstract).

Regarding **claim 27**, Hamabe and Hong disclose all the limitation as discussed in claims 3 and 19.

Regarding **claim 28**, Hamabe and Hong disclose all the limitation as discussed in claims 1 and 19.

Regarding **claim 29**, Hamabe and Hong disclose all the limitation as discussed in claims 19 and 28.

Regarding **claim 30**, Hamabe and Hong disclose all the limitation as discussed in claims 21 and 28.

Regarding **claim 31**, Hamabe and Hong disclose all the limitation as discussed in claims 22 and 28.

Regarding **claim 33**, Hamabe and Hong disclose all the limitation as discussed in claims 24 and 28.

Regarding **claim 34**, Hamabe and Hong disclose all the limitation as discussed in claims 25 and 28.

Regarding **claim 37**, Hamabe and Hong disclose all the limitation as discussed in claims 1 and 3.

Regarding **claim 38**, Hamabe and Hong disclose all the limitation as discussed in claims 19 and 28.

Regarding **claim 39**, Hamabe and Hong disclose all the limitation as discussed in claims 19 and 27.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Black et al. (US Patent number 6,208,873) discloses Transmitting Reverse Link Power Control Signals Based on the Probability That the Power Control Command is in Error.

Kang et al. (US Patent number 6,487,191) discloses Power Control with Interference Reduction During Soft Handoff in CDMA Cellular Communication Systems.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Art Unit: 2682

Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-6606 (for informal or draft communications, please label

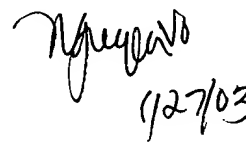
"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(703) 306-5936**. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Vivian Chin**, can be reached on **(703) 308-6739**. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

J.L
January 22, 2003

John J Lee



NGUYEN T. VO
PRIMARY EXAMINER